

Claims:

Claims 1-3, 6-10, 12-17, and 19-20 are currently pending in the application. Claims 9, 10, 12, 13, 14, and 15 are canceled in this amendment. With entry of this amendment, claims 1-3, 6-8, 16-17, and 19-20 will be pending in the application.

1.(previously presented) A method, comprising:

performing an inverse DCT upon data using processor executable instructions to generate a first result, having a first format including a sign bit, an integer portion, and a fractional portion, in a first color space;

converting the first result from the first format to a second format including an integer portion using conversion hardware; and

performing a color space conversion to generate a second result using the first result having the second format.

2.(previously presented) The method as recited in claim 1, wherein:

performing the color space conversion includes performing a matrix multiplication to generate the second result in a second color space from the first result in a first color space and having the first format.

3.(original) The method as recited in claim 2, wherein:

performing the inverse DCT includes using a Winograd process.

4.(canceled)

5.(canceled)

6.(previously presented) The method as recited in claim 3, wherein:

the first format includes data elements each having 16 bits; and

the second format includes data elements each having 8 bits.

7.(previously presented) The method as recited in claim 6, wherein:

the fractional portion of data elements includes 5 bits; and

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the integer portion of the data elements includes 8 bits.

8.(previously presented) The method as recited in claim 7, wherein:
the first color space includes a YCrCb color space; and
the second color space includes an RGB color space.

9.(canceled)

10.(canceled)

11.(canceled)

12.(canceled)

13.(canceled)

14.(canceled)

15.(canceled)

16.(previously presented) A data pipeline, comprising:

a processing device configured to execute instructions to compute an inverse DCT using a Winograd process to generate decompressed YCrCb color space data in a first format including a sign bit, an integer portion, and a fractional portion;

a converter configured to change the YCrCb color space data from the first format to a second format including an integer portion; and

a color space converter configured to generate RGB color space data from the YCrCb color space data in the second format.

17.(previously presented) The data pipeline as recited in claim 16, wherein:

the YCrCb color space data in the first format includes a first set of data elements each having 16 bits; and

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the YcrCb color space data in the second format includes a second set of data elements each having 8 bits.

18.(canceled)

19.(previously presented) The data pipeline as recited in claim 18, wherein:
the color space converter includes a configuration to generate RGB color space data from the YCrCb color space data in the second format using a matrix multiplication.

20.(previously presented) An apparatus, comprising:
means for executing code to perform an inverse DCT to generate data in a first format including a sign bit, an integer portion, and a fractional portion;
means for converting the data in the first format to the data in a second format including an integer portion; and
means for performing a color space conversion on the data.

21.(canceled)

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